

**REMARKS**

In light of the following remarks and above amendments, reconsideration and allowance of this application are respectfully requested.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 USC §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

Claims 2, 3, 5, 6, 8-11 and 14 and amended claims 1, 4, 12, and 13 are in this application. Claim 16 is newly added.

At page 2 of the outstanding Office Action of May 8, 2003, the Examiner rejected claims 1, 2 and 12-14 under 35 U.S.C. § 102(e) as being anticipated by Hellberg. (U.S. Patent No. 6,094,458) and Jewett (U.S. Patent No. 5,793,318). Furthermore, at page 2 of the outstanding Office Action of May 8, 2003, the Examiner rejected claims 1, 2 and 12-14 under 35 U.S.C. § 102(b) as being anticipated by Nettleship (U.K. Application GB 2 101 849). Applicants respectfully traverse the rejection.

Amended independent claim 1, recites in part, “Apparatus for storing and/or transmitting a one-bit signal, the apparatus comprising...an input inverter **for inverting alternate data bits** of an input one-bit digital signal...” (Underlining and Bold added for emphasis.)

It is respectfully submitted that Hellberg, Jewett and Nettleship do not teach the above-recited feature of amended independent claim 1. Hellberg teaches arrangements for

modulation and power amplification of low frequency or intermediate frequency signals (column 1, lines 6-11) and does not teach transmitting a 1-bit digital signal or inverting alternate data-bits of the input 1-bit digital signal. However, Hellberg does teach an inverter (column 9, lines 32-44 and column 14, lines 21-31) that delivers the inversion of a whole or complete digital signal Y as can be seen in figures 5 and 12. In contrast, the present invention as described in amended independent claim 1 teaches that alternate data bits of the 1-bit signal are inverted and not the whole signal. The purpose of our invention is to generate a signal with alternatively inverted data bits so that if noise (all zeroes) is transmitted, the data will be converted to alternate ones and zeroes this being a close representation of silence in a 1-bit system. Jewett teaches a method for the reduction of coherent interference between parts of the same circuit (column 1, lines 6-11) and that a raw digital output signal is XOR'd or inverted with one-bit pseudo-random numbers (column 2, lines 21-25). As can be seen in figures 1 and 3, the whole raw digital output signal is inputted into the XOR gate 18 of figure 1 or the XOR gate 48 of figure 3. In contrast, the present invention as described in amended independent claim 1 teaches that alternate data bits of the 1-bit signal are inverted and not the whole signal. Nettleship teaches encrypting digital signals for phase modulation on a carrier wave (Abstract). Nettleship does not mention anything about a 1-bit signal or inverting alternate 1-bit signal data as does amended independent claim 1. Therefore amended independent claim 1 is believed to be distinguishable from Hellberg, Jewett and Nettleship.

For reasons similar to those described above with regard to amended independent claim 1, amended independent claims 12 and 13 are also believed to be distinguishable from the applied references of Hellberg, Jewett and Nettleship.

Further, claims 2 and 14 depend from amended independent claim 1 and, due to such dependency, are also believed to be distinguishable from the applied references of Hellberg, Jewett and Nettleship for at least the reasons previously described. Therefore, claims 1, 2 and 12-14 are believed to be distinguishable from the applied references of Hellberg, Jewett and Nettleship.

Applicants therefore respectfully request the rejection of claims 1, 2 and 12-14 under 35 U.S.C. §102(b) and §102(e) be withdrawn.

At page 3 of the outstanding Office Action of May 8, 2003, the Examiner rejected claims 3, 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Hellberg (U.S. Patent No. 6,094,458) in view of Nishio et al. (U.S. Patent No. 5,719,574). Applicants respectfully traverse the rejection.

Claims 3, 8 and 9 are dependent either directly or indirectly from amended independent claim 1 and, due to such dependency, are also believed to be distinguishable from Hellberg for at least the reasons previously described. The Examiner did not rely on Nishio to overcome the above-identified deficiencies of Hellberg. Therefore, claims 3, 8 and 9 are believed to be distinguishable from the applied combination of Hellberg and Nishio.

Applicants therefore respectfully request the rejection of claims 3, 8 and 9 under 35 U.S.C. §103(a) be withdrawn.

At page 3 of the outstanding Office Action of May 8, 2003, the Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Hellberg (U.S. Patent No. 6,094,458) in view of Nishio et al. (U.S. Patent No. 5,719,574), as applied to claim 9, in further view of Redfern & Co. (U.K. Application 1 329 883). Applicants respectfully traverse the rejection.

Claims 10 is indirectly dependent from amended independent claim 1 and, due to such dependency, is also believed to be distinguishable from Hellberg for at least the reasons previously described. The Examiner did not rely on Nishio or Redfern & Co. to overcome the above-identified deficiencies of Hellberg. Therefore, claim 10 is believed to be distinguishable from the applied combination of Hellberg, Nishio and Redfern & Co.

Applicants therefore respectfully request the rejection of claim 10 under 35 U.S.C. §103(a) be withdrawn.

At page 4 of the outstanding Office Action of May 8, 2003, the Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Hellberg (U.S. Patent No. 6,094,458) in view of Hamasaki et al. (U.S. Patent No. 5,682,162). Applicants respectfully traverse the rejection.

Claims 11 is directly dependent from amended independent claim 1 and, due to such dependency, is also believed to be distinguishable from Hellberg for at least the reasons previously described. The Examiner did not rely on Hamasaki to overcome the above-identified deficiencies of Hellberg. Therefore, claim 11 is believed to be distinguishable from the applied combination of Hellberg and Hamasaki.

Applicants therefore respectfully request the rejection of claim 11 under 35 U.S.C. §103(a) be withdrawn.

At page 4 of the outstanding Office Action of May 8, 2003, the Examiner stated that claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants submit that claim 4 has been rewritten in independent form as

suggested by the Examiner, and as such is allowable. Claims 5 and 6 depend from amended claim 4 and as such are allowable as being dependent upon an allowable base claim.

Further, Applicants have added new claim 16 which is directly dependent form amended independent claim 1 and as such is believed to be allowable.

It is to be appreciated that the foregoing comments concerning the disclosures in the cited prior art represent the present opinions of the applicants undersigned attorney and, in the event, that the Examiner disagrees with any such opinions, it is requested that the Examiner indicate where in the reference, there is the bases for a contrary view.

Please charge any fees incurred by reason of this response to Deposit Account No.

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Respectfully submitted,  
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